Southern Appalachian Creature Feature Podcasts

The passenger pigeon and unforeseen consequences

Greetings and welcome to the Southern Appalachian Creature Feature.

I've often spoken of white nose syndrome, the mysterious ailment killing thousands of bats in the northeast which is working its way southward. One of the myriad questions surrounding this affliction is what the death of thousands of bats means for the greater natural community, including human health, considering the volume of insects bats consume and that an impact on one part of a community can reverberate throughout, possibly with serious unforeseen consequences.

David Blockstein is an ornithologist who has looked at the extinction of the passenger pigeon, once the most numerous bird in North America, and possible impacts on human health today. The foundation of Blockstein's thinking is research from the Institute of Ecosystem Studies in New York, where scientists have shown that Lyme disease increases two years after a bumper crop of acorns. The bumper crop creates a concentration of white-tailed deer, providing a fertile breeding ground for ticks. The acorn crop also increases the population of white-footed mice, Lyme disease carriers. The ticks reproduce prolifically on the deer, and become Lyme disease carriers after feeding on the blood of the mice. Passenger pigeons travelled the eastern forests looking for bumper crops of acorns, beechnuts and chestnuts to eat. Blockstein wonders if tremendous acorn consumption by passenger pigeons prevented local concentrations of deer, then mice, then disease-bearing ticks from forming and contributing to increases in Lyme disease, now a greater human health threat as a result.

For WNCW and the U.S. Fish & Wildlife Service, this is Gary Peeples.